

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspro.gov

APPLICATION NO.	NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/704,848	11/02/2000		Mats Olsson	45051-00004	4869
7	590	03/28/2003			
Stanley R Mo	•		EXAMINER		
Jenkens and Gi 3200 Fountain 1445 Ross Ave	Place			WIMER, MICHAEL C	
Dallas, TX 75202				ART UNIT	PAPER NUMBER
				2821	
				DATE MAILED: 03/28/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary Saminer		Application No.	Applicant(s)					
Michael C. Wimer - The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period f r Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Edunisous of time may be available under the presence of 37 CPR 1.136(a). In no event, however, may a reply be timely filled after 50 (6) MONTHS from the mailing date of the communication. - Edunisous of time may be available under the presence of 37 CPR 1.136(a). In no event, however, may a reply be timely filled after 50 (6) MONTHS from the mailing date of this communication. - Edunisous of time may be available under the presence of 37 CPR 1.136(a). - If NO period point the set or extended period for reply vol. by statute, cause the application to become ABANDONED (35 U.S. 6, \$133). - Any reply received by the Office date then thin the months after the mailing date of this communication, even if timely filled, may reduce any second plant term adjustment. See 37 CPR 1.704(b). Status 1)		09/704,848	OLSSON ET AL.					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period f r Repty A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Edenoison of time may be autisable under the promise of 37 CPR 1.13(a). In cevent, however, may a reply be timely filed after \$K; (b) MONTH'S from the mailing date of this communication. - If the period for reply specified date is less than thing (so) large, as did not provided thribly). - If the period for reply specified date is less than the mailing date of this communication. - If the period for reply welf-life time there enhanced as the second and application to become ABANCONED (39 U.S.C. § 133). - Provide the second of the second and the second an	Offic Action Summary	Examiner	Art Unit					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ② MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13(a). In no event, however, may a reply be timely filled attant SX (b) MONTHS from the mailage date of this communication. - If NO period for reply is specified above, the maximum slatutory period will apply and will expire SX (b) MONTHS from the mailage date of this communication. - If I NO period for reply is specified above, the maximum slatutory period will apply and will expire SX (b) MONTHS from the mailing date of this communication. - Failure to reply within these text centeded period for reply will, by state, cause the application is bocomm ABADONED (3 U.S. 5 133). - Any reply sectived by the Office later than three months after the mailing date of this communication, even if timely filled, may reduce any status. - Any reply sectived by the Office later than three months after the mailing date of this communication, even if timely filled, may reduce any status. - Any reply sectived by the Office later than three months after the mailing date of this communication, even if timely filled, may reduce any status. - Any reply sective to communication (s) filled on 11 February 2003. - Any reply sective to provide the section is set of the communication. - This action is FINAL 2b)	·	Michael C. Wimer	2821					
THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be variable under the provisions of 3 CPER 1.13(a). In no event, however, may a reply be limely filed after Six (6) MONTHS from the mailing date of this communication. - If the period or neply sealthed above is less than him; (20) days, a reply within the batteriory minimum of thith; (30) days, a reply within the substance of the provision of the date of this communication, even if timely filed, may reduce any canned patent term adjustment. See 37 CPR 1.704(b). Status 1) Responsive to communication(s) filed on 11 February 2003. 2a) This action is FINAL. 2b) This action is non-timelation of the provision of allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 2and ±-24 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Application Papers 9) The proposed drawing correction filed on is: a) accepted or b) disapproved by the Examiner. 11) The proposed drawing correction filed on is: a)								
1) Responsive to communication(s) filed on 11 February 2003. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1.2 and 4-24 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 20-23 is/are allowed. 6) Claim(s) 13-18 is/are objected to. 8) Claim(s) 13-18 is/are objected to. 8) Claim(s) 13-18 is/are objected to. 8) Claim(s) mare subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.	A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1.2 and 4.24 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 20-23 is/are allowed. 6) Claim(s) 1.2.4-12.19 and 24 is/are rejected. 7) Claim(s) 13-18 is/are objected to. 8) Claim(s) 13-18 is/are objected to. 8) Claim(s) 13-18 is/are objected to by the Examiner. 10) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) cocepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.		February 2003 .						
3)								
Disposition of Claims 4) ☐ Claim(s) 1.2 and 4-24 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) 20-23 is/are allowed. 6) ☐ Claim(s) 1.2.4-12.19 and 24 is/are rejected. 7) ☐ Claim(s) 1.3-18 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) ☐ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.	3)☐ Since this application is in condition for allowa							
4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) 20-23 is/are allowed. 6) □ Claim(s) 1.2.4-12.19 and 24 is/are rejected. 7) □ Claim(s) 13-18 is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) □ The proposed drawing correction filed on is: a) □ approved b) □ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) □ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) □ The translation of the foreign language provisional application has been received.								
5)	4) Claim(s) 1.2 and 4-24 is/are pending in the application.							
6)	4a) Of the above claim(s) is/are withdrawn from consideration.							
7) ⊠ Claim(s) 13-18 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) ☐ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received.	5)⊠ Claim(s) <u>20-23</u> is/are allowed.							
8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received.	6)⊠ Claim(s) <u>1,2,4-12,19 and 24</u> is/are rejected.							
Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received.	7)⊠ Claim(s) <u>13-18</u> is/are objected to.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received.		r election requirement.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received.								
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received.	10)☐ The drawing(s) filed on is/are: a)☐ accep	oted or b) objected to by the Exa	miner.					
If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received.	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received.	11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received.	If approved, corrected drawings are required in reply to this Office action.							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)	12) The oath or declaration is objected to by the Examiner.							
 a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 	Priority under 35 U.S.C. §§ 119 and 120							
 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 	13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 	a) ☐ All b) ☐ Some * c) ☐ None of:							
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 	1. Certified copies of the priority documents have been received.							
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received.	2. Certified copies of the priority documents have been received in Application No							
a) \square The translation of the foreign language provisional application has been received.	application from the International Bureau (PCT Rule 17.2(a)).							
, , , , , , , , , , , , , , , , , , , ,	14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.								
Attachment(s)								
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4) Interview Summary (PTO-413) Paper No(s) 5) Notice of Informal Patent Application (PTO-152) 6) Other:	2) DNotice of Draftsperson's Patent Drawing Review (PTO-948)	5) D Notice of Informal						

Application/Control Number: 09/704,848

Art Unit: 2821

DETAILED ACTION

Claim Rej ctions - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1,2,4,5,7-11,16/11,17-19 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Pal et al (5572227).

Regarding Claims 1,2,4,5,7-11,16/11,17-19 and 24, Pal et al teaches a multiband antenna array antenna for use with portable hand held radios, comprising a flexible antenna support composed of an insulator sheet 4 of Kapton™, with printed circuit antenna elements 1-3 all resonant in respective bands and covered by a flexible radome 11, all arranged as claimed. The entire antenna including the housing 11 is deemed flexible because of its use on a hand held radio, and by virtue of the thin plastic material used in the substrate 4 and radome 11. The antennas are taught to be operational on L, S and UHF bands, as claimed. Ground terminals are near the connectors, coaxial lead-outs for each antenna band.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and



Art Unit: 2821

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1,2,4,5,7-11,12,16/11,16/12,17-19 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over UK Pat. No. 2322011A (Pal et al) in view of Pal et al (5572227).

Regarding Claims 1,2,4,5,7-11,12,16/11,16/12,17-19 and 24, Pal et al (UK 2322011) also teaches a multiband antenna array 26,28 mounted on a flexible dielectric substrate 24 and covered by a flexible, plastic housing/radome 42 and mounted on a portable radio 10, with ground portions on the networks 30,32 and fed with coaxial cables 34 and 38. It is obvious to the skilled artisan that the whip antenna formed by the flexible film and radome, combined, provide a flexible whip always desired in a portable transceiver. As to Claim 12, the radio 10 is built with a p.c. board and the cables are connected thereto. Pal et al ('227) is cited teaching the frequency bands recited to be obvious to the skilled artisan.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pal et al in view of Pal et al as applied to claims 1,4,5 above, and further in view of Korisch (5926139).

Korisch is cited to show that an inverted-F antenna is a planar device formed on a substrate. It would have been obvious to the skilled artisan employ such an antenna in the Pal et al devices.

Allowable Subject Matter

Application/Control Number: 09/704,848

Art Unit: 2821

- 6. Claims 13-15,16/13,16/14,16/15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Wimer whose telephone number is (703) 305-3555. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K. Wong can be reached on (703) 308-4856. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Michael C. Wimer Primary Examiner Art Unit 2821

MCW 27 February 2003